

## Silver Ionisation

In a previous article I explain the reasons for conserving water and what you can do to reduce losses. One major way to reduce water use is to empty the pool less often – and therefore keeping the water in tip-top condition is of the utmost importance.

Having got your pH correct at 7.4 or thereabouts, with the water gently mineralised from all the calcium it has stripped from your grout, and the chlorine levels at a comfortably constant 1 to 3 parts per million, you might be forgiven for thinking that your water would stay that way for ever. Sorry, 'fraid not.

If you use chlorine as a sanitiser there will be a constantly rising level of cyanuric acid in the water. When chlorine tablets dissolve, in water of pH 7.4, two different chlorine compounds are formed : - *Hypochlorous Acid* which sanitises the pool but which is unstable in sunlight, and *Cyanuric Acid* which is a stabiliser for the Hypochlorous acid. The first compound gets used up as it goes about the business of sanitising the pool but the Cyanuric acid remains in the water. Eventually the levels get so high that the Hypochlorous Acid is ineffective because it's over-stabilised. The only cure for this is to replace up to half of the water with fresh.

Of course, you don't have to use chlorine to sanitise your pool there are many other alternatives. One of the best and most affordable is Silver Ionisation of the water, coupled with an automatic pH regulator.

Thousands of years ago it was known by intrepid seafarers that a barrel of water would remain fresh if a silver coin and a copper coin were placed in it. It didn't work with 2 silver coins and it didn't work with silver and gold. The Ancients couldn't figure out how it worked, but they never stopped thinking about it until one day, thousands of years later, an Italian worked it out and we all ended up with laptops, or something like that.

These days we know all about galvanic currents in dissimilar metals resulting in ionic discharge, (don't we?), and can benefit from the marriage of modern technology and Phoenician folklore. A modern Silver Ioniser passes a current between 2 dissimilar metals - copper and silver oddly enough. Silver ions are passed through the pool water as it emerges from the sand-filter and before it is returned to the pool via the jets. The net effect of this is to obliterate all micro-organisms, algae, fungi, etc., leaving the water 'clean enough to drink' according to the manufacturers. Thanks very much, but I'll have a beer if it's all the same to you!

Nonetheless, Silver Ionisation is an efficient sanitiser of the pool and will save you most of the pool-chemical expenses and the regular replacement of half your pool water.

Most units feature an automatic pH monitor and systolic pump to inject acid into the pool as required keeping the levels perfect all the time. A carefully controlled pH is 50% of the way to a Perfect Pool.